

Notice of Allowability	Application No.	Applicant(s)	
	10/620,581	BALAJI ET AL.	
	Examiner	Art Unit	
	NATHAN PRICE	2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to communications received 08 January 200 and interview summary9.
2. ☒ The allowed claim(s) is/are 3,6,7,9,15,18,19,21,27-28 and 31-33 renumbered 1-13.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ol style="list-style-type: none"> 1. <input type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date ____ 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>20090313</u> . 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other ____. |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

/Meng-Ai An/
Supervisory Patent Examiner, Art Unit 2195

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Stephen G. Sullivan (Reg. No. 38329) on 12 March 2009.

The claims have been amended as follows:

31. A method for providing data integration and exchange between a plurality of client applications over a network, wherein each of the client applications access a respective data source, the method comprising:

(a) providing an adapter AP at each of the client applications that provides a first set of methods for the client applications to use to translate data in the respective data sources into XML format, wherein the data sources of each of the client applications store different types of data in different formats, wherein the data from a given data source is not directly accessible by the other client applications that utilize data of a different type or format;

(b) modifying each of the client applications to invoke the first set of methods in the adapter API to convert the data in the respective data sources into XML format

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according to a registered schema definition and saving the XML format data from the respective data sources in XML files;

(c) submitting each of the XML files to an import repository at a server, wherein the import repository is separate from a database at the server;

(d) prior to storing data from the XML files in a database, validating each of the XML files in the import repository against a document type definition (DTD) corresponding to the respective data sources;

(e) parsing the validated XML files in the import repository and storing name/value pairs in a database at the server according to a hierarchy specified by the corresponding DTD, thereby standardizing the data from the data sources of the client applications; and

(f) including a second set of methods in the adapter API for the client applications that provides consumption logic and methods for automatically exporting data defined in a Web-based schema registry, from the database into the client applications using Web services.

32. A computer-readable medium containing program instructions for providing data integration and exchange between a plurality of client applications over a network, wherein each of the client applications access a respective data source, the program instructions for:

(a) providing an adapter API at each of the client applications that provides a first set of methods for the client applications to use to translate data in the respective data

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sources into XML format, wherein the data sources of each of the client applications store different types of data in different formats, wherein the data from a given data source is not directly accessible by the other client applications that utilize data of a different type or format;

(b) modifying each of the client applications to invoke the first set of methods in the adapter API to convert the data in the respective data sources into XML format according to a registered schema definition and saving the XML format data from the respective data sources in an XML file;

(c) submitting each of the XML files from the client applications to an import repository at a server, wherein the import repository is separate from a database at the server;

(d) prior to storing data from the XML files in a database, validating each of the XML files in the import repository against a document type definition (DTD) corresponding to the respective data sources;

(e) parsing the validated XML files in the import repository and storing name/value pairs in a database at the server according to a hierarchy specified by the corresponding DTD, thereby standardizing the data from the data sources of the client applications; and

(f) including a second set of methods in the adapter API for the client applications that provides consumption logic and methods for automatically exporting data defined in a Web-based schema registry, from the database into the client applications using Web services.

33. A data integration system, comprising:

a network;

a server coupled to the network, the server including a schema registry, an import repository, an XML loader, a database, and a published adapter API at each of the client applications that provides a first set of methods for translating data in respective data source into XML format; and

a plurality of client applications coupled to the network and in communication with the server, wherein each of the client applications access the respective data source, and wherein the data sources of each of the client applications store different types of data in different formats, wherein the data from a given data source is not directly accessible by the other client applications that utilize data of a different type or format, and

wherein at least a portion of the client applications includes a corresponding schema definition and document type definition (DTD) registered with the schema registry, and the portion of the client applications includes generation logic for making calls to the first set of methods in the adapter API, such that data in the respective data sources are converted into XML format according to the corresponding schema definition and stored in XML files,

wherein each of the XML files is submitted to the import repository at the server, wherein the import repository is separate from a database at the server, wherein each of the XML files in the import repository is validated against the corresponding DTD

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prior to storing data from the XML files in a database, and wherein the XML loader parses the validated XML files in the import reposition and stores name/value pairs in the database at the server according to a hierarchy specified by the corresponding DTD, thereby standardizing the data from the data sources of the client applications;

wherein the adapter API further includes a second set of methods for the client applications that that provides consumption logic and methods for automatically exporting data defined in the schema registry, from the database into the client applications using Web services.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NATHAN PRICE whose telephone number is (571)272-4196. The examiner can normally be reached on 8:30am - 5:00pm, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Meng-Ai An/
Supervisory Patent Examiner, Art Unit 2195

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